



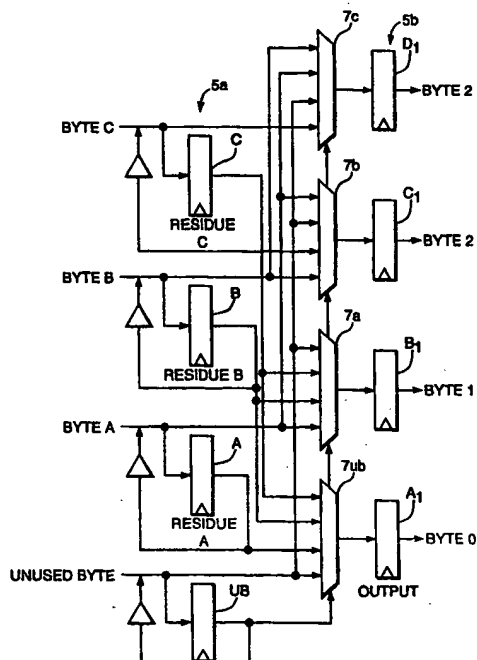
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>G06F 13/28</b>		A1	(11) International Publication Number: <b>WO 99/26156</b>
		(43) International Publication Date: 27 May 1999 (27.05.99)	
(21) International Application Number: PCT/GB98/03369		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 11 November 1998 (11.11.98)			
(30) Priority Data: 9724027.9 13 November 1997 (13.11.97) GB			
(71) Applicant (for all designated States except US): VIRATA LIMITED [GB/GB]; Mount Pleasant House, 2 Mount Pleasant, Huntingdon Road, Cambridge CB3 0BL (GB).			
(72) Inventor; and (75) Inventor/Applicant (for US only): MILWAY, David, Russell [GB/GB]; 90 Rooks Street, Cottenham, Cambridgeshire CB4 4RB (GB).			
(74) Agents: COZENS, Paul, Dennis et al.; Mathys & Squire, 100 Grays Inn Road, London WC1X 8AL (GB).			
		<b>Published</b> With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	

(54) Title: BYTE ALIGNMENT METHOD AND APPARATUS

## (57) Abstract

The method and apparatus correct for byte misalignment in a block of data. Switch means are set to perform a switching cycle depending on the amount of byte misalignment. Each word in the block is then transferred in accordance with the switching cycle, so that the bytes are aligned by the transfer, the aligned bytes then being stored. A first word in the data block is transferred into an input register where the amount of byte misalignment is determined in order to control the switching cycle, i.e. when the words are transferred to an output register. Also disclosed is a method of translating the encapsulation of a protocol labelled data block by removing an original header and original trailer from the data block, providing a new header and a new trailer and using the byte alignment method to determine any byte misalignment in the new header or trailer. The new header, new trailer and the original data block are transferred into storage with any necessary shift in the data block to compensate for the byte misalignment.



**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakhstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LJ	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		